

# CONDITIONAL USE PERMIT APPLICATION SNOWFIELD ROCK PRODUCTS, LLC/GRANITE CONSTRUCTION COMPANY

**PARCEL # 2025-LS** 

SITE ADDRESS/LOCATION: 1.2 MILES NE FROM US INTERSTATE 15/EXIT 33

REQUEST: LAND USE AUTHORITY APPROVAL/CONDITIONAL USE PERMIT

TO INSTALL AND OPERATE AN

ASPHALT PLANT AT THE EXISTING AGGREGATE MATERIALS FACILITY

**DATE: MARCH 9, 2010** 

PREPARED FOR:

WASHINGTON COUNTY PLANNING AND ZONING

**197 EAST TABERNACLE** 

ST. GEORGE, UTAH 84770

**PREPARED BY:** 

**GRANITE CONSTRUCTION COMPANY** 

**1000 NORTH WARM SPRINGS ROAD** 

**SALT LAKE CITY, UTAH 84116** 



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**CURRENT AND PROPOSED DRAINAGE** 

PHOTOGRAPH OF PROPOSED ASPHALT PLANT

FIGURE 5:

FIGURE 6:



#### 1.0 INTRODUCTION

The Snowfield Rock Products, LLC (aka Rodgers Rock) and the Granite Construction Company (Granite), Salt Lake City, Utah are respectfully requesting approval of a Conditional Use Permit (CUP) allowing the installation and operation of an asphalt (hot mix asphalt) plant at the existing Snowfield Rock Products, LLC, aggregate facility located approximately one mile northeast from Exit 33 of US Interstate 15 (I-15), in Washington County, Utah.

# 2.0 PROPERTY/OWNERSHIP/PARCEL AND ZONING INFORMATION

The Snowfield Rock Products property (Property) is located north of Exit 33 on the east side of I-15 between the cities of St. George and Cedar City, Utah, specifically the Property is situated approximately 28 miles northeast of St. George and 24 miles south of Cedar City (See Figure 2 Location Map).

The property is owned by Snowfield Rock Products, LLC and historically has been used and operated as an aggregate quarry and processing facility since the early to mid 1900s.

The Washington County Parcel Identification Number is #2025 LS and includes 339.74 acres. The property is rectangular in shape and contiguous.

The property is located in a primarily rural and undeveloped area with a zoning designation of Open Space Transition Zone (OST). A site plan (Figure 1) is provided as an attachment.

Access to the property is provided from I-15, Exit 33 (both north and south) and an existing frontage road providing direct access to the entrance of the aggregate facility. The primary function and use of the frontage road is associated with providing access to the Property and a single-family residence located south of the facility.

# 3.0 EXISTING USES

The Property has historically been and is currently used and operated as an aggregate quarry and processing facility producing and providing high quality construction aggregate materials to both the St George and Cedar City metropolitan areas. According to information provided by the property owner, the Property has been used as an aggregate quarry and processing facility since the early to mid 1900s.

#### 4.0 SURROUNDING LAND USES

The Property is located in a rural setting adjacent to the I-15 corridor. Provided below is a summary of the surrounding properties, their size and the respective current uses. Current photographs of the site and adjoining properties are provided as an attachment in Figure 3.

North:	Bureau of Land Management	52,859.57 acres	Undeveloped
South:	Bureau of Land Management	52,859.57 acres	Undeveloped
Southwest:	Snowfield Rock Products, LLC	55.26 acres	Undeveloped
<b>Southwest Corner:</b>	Snow Family LC	280.32 acres	Undeveloped
Northeast Corner:	United States of America	120 acres	Undeveloped



East:

**Bureau of Land Management** 

52,859.57 acres

Undeveloped

West:

Snowfield Rock Products, LLC

8.53 acres

Undeveloped

Johnson, Derrell

9.95 acres

**Private Residence** 

Squire, Duwayne G TR

40 acres

Undeveloped

Pintura Properties, LLC

40 acres

Undeveloped

The Property (existing materials facility) and the Derrell Johnson residence are the only developed properties in the vicinity. Given the undeveloped character and use of the surrounding properties the proposed addition and operation of the asphalt plant will not cause impact or be detrimental to surrounding properties or their uses and will not interfere with the lawful use of the surrounding properties.

# 5.0 PROPOSED LAND USE AUTHORITY APPROVAL

The proposed action for this Land Use Authority Approval is to receive approval of a Conditional Use Permit (CUP) for the installation and operation of an asphalt plant at the existing Snowfield Rock Products aggregate processing facility. Asphalt plant operations co-located with aggregate processing facilities is commonly viewed as a complimentary process and an accessory use associated with existing aggregate extraction and processing.

The asphalt plant operations and equipment will be established within the existing footprint of the aggregate plant operations area. Equipment specific to the asphalt plant operations will include:

- One Gencor Asphalt Plant (plant schematic and photograph provided)
- Supporting equipment, including a loader, air filtration baghouse, lime silo with fabric filter baghouse, heated asphalt storage tanks, one fully contained 12,000 diesel fuel tank, 12,000 gallon burner fuel tank, two diesel electrical generators and one 5,000 gallon aboveground water tank for dust suppression and fire protection purposes.

A plant equipment schematic is presented in Figure 4 and a photograph of the plant equipment that will be used at the facility are provided in Figure 6.

The asphalt plant operations are intended to complement the existing aggregate operations by allowing diversification of the types of construction materials available from the facility which will support public and private development projects throughout the region. Granite will be the designated operator of the facility according to a lease agreement established with the current owner.

# 6.0 DEMONSTRATION OF GENERAL REVIEW STANDARDS

# 6.1 COMPLIANCE WITH WASHINGTON COUNTY ORDINANCE, STATE AND FEDERAL LAW

Aggregate extraction and processing are current approved uses of the existing facility. The addition of asphalt production capabilities at the facility complements the existing use of the facility. Approval of the allowance to operate an asphalt plant provides additional beneficial use of the material resources and to support regional development. The proposed activity for this CUP are consistent with and comply with all terms, conditions and requirements of Washington County's Ordinances, Land Use Development Standards and all State and Federal Laws.



Additional regulatory permits which will be obtained upon approval of this request include the following:

- Air Quality Permit (issued as an Approval Order by Utah Department of Environmental Quality)
- Storm Water Permit (issued by the Utah Department of Environmental Quality)

# 6.2 PROPOSED USE NOT DETRIMENTAL TO PUBLIC HEALTH, SAFETY OR WELFARE

The addition of an asphalt plant to the Property does not represent a significant change or deviation from the existing use at the site; therefore, no impacts to public health, safety of general welfare will occur, or are anticipated as a result of the proposed operations. Granite is committed to conducting all operations at the property in a manner consistent with our continued involvement with the Clean Utah Partner Program, which is a voluntary program for companies dedicated to being an environmental steward and going beyond regulatory compliance for the betterment of the surrounding communities.

#### 6.3 CONSISTENCY WITH GENERAL PLAN CHARACTERISTICS AND PURPOSES

The primary purpose of a General Plan is to establish a process of policy and plans to allow communities to establish an effective guide to growth to establish and protect unique characteristics of the community. The fundamental elements range from land use planning objectives, population, economic growth, transportation and preservation of the environment.

The intent of this application proposal is to add asphalt production at the existing facility in order to diversify the types of construction materials that can be produced to serve local projects and customers. The goal and standards of operation at the facility, by both the property owner and Granite are to manage and operate the facility in a manner consistent with the expectations and standards of local government and the community.

#### **Land Use Element**

Washington County is and continues to experience unprecedented growth and the need and demand on local resources continues to grow. The communities located throughout Washington County also rely on tourism as a significant segment of the local economy and the visual character of local businesses reflects upon the overall impression of the entire community.

Granite is sensitive to how our facilities are perceived and are committed to managing and operating in a responsible manner and will maintain the asphalt plant and the facility to a high standard of visual appearance and operational excellence.

#### **Public Services Element**

The addition of an asphalt plant at the facility will not cause a greater demand for public services or infrastructure due to no intensification of operations or conducting significantly different activities associated with the use. Conversely, the asphalt plant will become an additional resource to supply the construction material needs of the growing community.

#### **Transportation Element**

Transportation access and egress from the existing facility will remain identical to current transportation patterns. Access and egress to and from the site will be provided from the north



and south exits of Exit 33 from I-15, providing allowance for safe acceleration and deceleration on to the highway. Once off from the main highway, the access road is a frontage road located on the east side of I-15. Total distance along the frontage road to the facility entrance is approximately one mile. Vehicles using the frontage road are primarily limited to the materials facility users, one private residence and minimal users accessing public land that surround the facility. Given the high volume capacity of I-15 and the low transportation users of the frontage road, no significant transportation concerns or deviation from current conditions (capacity, volume or public safety) are associated with the proposed use. The facility traffic and hauling routes are shown on the Location Map presented in Figure 2.

#### **Environment Element**

The intent of the proposed use is to not create or cause any detrimental environmental impact to the facility property or to any surrounding property. All of the proposed use activities and operations will be conducted within the existing footprint of the quarry facility. Granite, a Clean Utah Partner, is committed to conducting all of our operations in a responsible manner and utilizes all available best practices to ensure no significant environmental impacts are caused from our operations. Priority environmental controls will be established to control plant emissions, dust management, safe oil handling and storage and drainage controls to manage and protect storm water quality.

#### 6.4 CONSISTENCY WITH ZONING CHARACTERISTICS AND PURPOSES

The Snowfield Rock Products materials facility and property (Parcel #2025-LS) is located in a planning zone designated as Open Space Transition Zone (OST). The purpose of the OST Zone is to provide protection of primarily undeveloped private property. Conditional Uses appropriate for the zone include mining and mineral development and activities consistent and similar to the character and intent of the OST Zone. The proposed operation of an asphalt plant at the facility will allow for the beneficial use of aggregate minerals processed at the existing facility by providing alternative construction materials to be produced from onsite materials to support regional construction and infrastructure maintenance and improvement projects.

Section 10-6B-4 outlines Height Regulations specified for this Zone. This section of the Code establishes that no building shall be erected to a height of thirty five feet (35 feet) without a Conditional Use Permit. The asphalt plant equipment associated with this CUP approval request is portable equipment that is axle-mounted and portable and is installed without requirement of a typical structure foundation. While technically not a building structure the plant equipment's maximum height is sixty feet (60 feet) above the ground surface and the CUP approval is requested to include the variance over the 35 feet maximum height allowance for the OST Zone. The asphalt mix storage silo, used to store and stage the asphalt for truck load-out is the plant equipment with the greatest height elevation. Mitigation of potential impacts associated with the height of the equipment will be placement of the equipment within the depression of the quarry floor, which will provide the greatest shielding and buffering of the equipment at the facility. In addition, the paint colors on the silo are gray with other neutral tints that will visually blend with the surrounding background colors.



# 6.5 SITE PLAN REVIEW

#### 6.5.1 TRAFFIC SAFETY

No traffic safety concerns are anticipated to be associated with the proposed asphalt plant operations at the facility. Facility access and egress are provided by Interstate 15, Exit 33 for both north and south travel directions. After exiting I-15, access to the existing materials facility is provided by a limited use frontage road, located on the east side of I-15. Frontage road traffic is primarily limited to material haul trucks using the quarry facility, private access use for a local residence, and periodic users gaining access to undeveloped public lands.

Truck traffic associated with the addition of asphalt plant operations will be very similar to truck traffic volumes associated with the current production/operation of the materials facility. No significant increase of material production will occur and the total number of truck trips should remain near the same as existing potential conditions. The main difference is the majority of the trucks will be hauling asphalt versus conventional construction aggregates. Traffic haul routes associated with the asphalt plant operations are presented in Figure 2.

Provided below is a breakdown of vehicle/truck traffic associated with the asphalt plant operations. The truck trip estimates are based on a total annual asphalt production of 500,000 tons.

Total Asphalt Tons (annual) 500,000 tons

Asphalt Tons per Truck (truck plus trailer) 42 tons per trip

Total Number of Truck Trips 11,905 annual truck trips

Daily Average Truck Trips 44 daily truck trips

(based on an average of 270 days per year)

It must be noted that truck traffic is dependent upon the economic demand, project schedules, seasonal and weather conditions and other factors that drive asphalt production. Larger asphalt intensive projects, such as road and highway projects will result in higher volumes of truck traffic, while smaller roadway or parking lot type projects will generate significantly lower traffic volumes. Based on these factors, it is estimated that the maximum truck traffic generated on a high demand day would range from 44 to 100 daily truck trips and low demand days would range from 0 to 43 daily truck trips with the majority of the truck traffic activity occurring between April and November.

#### 6.5.2 ADEQUATE UTILITY CAPACITY

The proposed asphalt plant operations will be self-supporting and not require or place a burden on local utilities. Electrical power for the plant (plant operation, lighting and oil heating) will be provided by site generated power from electrical generators, identical to existing operations.

Portable sanitation facilities will be used at the asphalt plant similar to the existing operations. Contracted pumping and cleaning will be provided by the subcontracted sanitation company.

Nonpotable water storage of 5,000 gallons will be maintained at the facility for dust suppression and fire prevention and control purposes. Water will be trucked to the facility from a water fill



station located off of I-15 Exit 36 (located north of the facility). Bottled drinking water will be available and provided for all employees and visitors to the facility.

Solid waste containers (roll off dumpster) will be utilized at the facility to manage and control the anticipated small quantities of facility generated wastes (paper, cans and bottles). Waste hauling and disposal will be provided by a local waste management company.

#### 6.5.3 ADEQUATE EMERGENCY ACCESS

Emergency access to the facility will be provided at all times. A key/combination will be provided to regional emergency response agencies ensuring ready access to the facility (locked gated entrance) during all periods of the operations.

# 6.5.4 ADEQUACEY OF PARKING (ONSITE AND OFFSITE)

Given the type and nature of the operation, need and/or demand for onsite or offsite parking is limited. Site personnel and visitors are primarily limited to employees (up to 10), delivery truck drivers who rarely park or leave their vehicles and Department of Transportation or Public Works employees/customers. Adequate parking areas will be provided to accommodate limited parking needs at the facility.

#### 6.5.5 FENCING, SCREENING AND LANDSCAPING

Fencing and a locked gate are provided along all of the potential public access points at the facility. Perimeter locations surrounding the facility are maintained in a natural state with natural topography and native vegetation.

The asphalt plant will be located within the existing basin of the quarry floor. This positioning will provide partial screening of the plant area from the I-15 corridor. Additionally, the plant positioning and orientation was selected to provide the greatest possible screening from the one residential property located approximately ¼ mile south from the proposed plant. The screening is intended to minimize potential impacts associated with visibility, noise and glare from security lighting.

The materials facility and the asphalt plant are located in a rural natural setting. All areas outside planned disturbance areas will remain in a natural condition and existing vegetation will be maintained to preserve the natural setting of the area. No additional landscaping will be provided or is proposed.

#### 6.5.6 EXTERIOR LIGHTING

Pole-mounted security lighting is currently established at the materials facility. The asphalt plant also has attached security lighting. In order to mitigate any potential glare caused by the additional asphalt plant lights, the lights will be directed away from or shielded to not cause any impacts to the residence located south from the operations area.

In the event that night paving operations are required at the facility, additional trailer-mounted lighting may be required to ensure safe working conditions for the drivers and employees at the facility. Again to mitigate potential impacts, lighting will be positioned and shielded to limit glare or light concerns at adjoining properties.



#### 6.5.7 SIGNAGE

No new facility identification signs are requested as part of this application. Signs that will be used within the interior of the operations will be limited to mine hazard alert/instruction signs, required by the Mine Safety and Health Administration and vehicle speed limit (maximum of 15 miles per hour) to promote site safety and to minimize dust from vehicle traffic. All signs will be located and placed in areas that remain consistent with the objectives of Chapter 19, Section 10-19-3 of the development ordinance.

# 7.0 MANAGEMENT AND MAINTENANCE

Granite will be the operator responsible for management and maintenance of facility operations. All site operations will be conducted in accordance with all terms, conditions and requirements specified in the approved CUP and all environmental regulatory permits associated with site operations. High standards of facility cleanliness and operational controls will be maintained at all times.

A facility and operations contact list will be provided to Planning Staff to allow immediate contact and access to Granite employees responsible for managing the site operations in the event of questions or concerns. All questions or concerns associated with facility operations will be addressed immediately and any needed follow up will be provided to Planning Staff.

# 8.0 NEED FOR ESSENTIAL SERVICES

The asphalt plant operations will not require or create an increase in the need or burden upon essential services including police protection, fire protection, emergency response services, roads or access for emergency vehicles or surround property users, schools or school busing and any other public utility services including drinking water, sewer, storm drainage or garbage removal.

# 9.0 CUP SPECIFIC REVIEW STANDARDS (SUPPORTING OPERATIONS FOR GRAVEL PIT/MINING)

#### 9.1 NOISE AND DUST

The main source of continuous and prevalent noise in the vicinity of the existing facility is generated by vehicle traffic traveling along the I-15 corridor. The existing materials processing operations represents a fixed-location sporadic source of noise, localized to the immediate vicinity of the facility. The asphalt plant operations will become an additional source of fixed-location sporadic noise during periods when the asphalt plant is operating; however, no significant intensification of generated noise above existing levels will result.

The nearest sensitive receptor is a single-family residence located approximately ¼ mile south from the active operations area of the materials facility. Natural buffers including distance of separation, topographic relief, natural vegetation and a drainage feature provide separation between the differing uses.

Additional strategies to control and buffer noise at the proposed facility will include plant positioning and orientation, vehicle traffic patterns and allowable speeds and positioning of aggregate stockpiles to further reduce potential for noise impacts at the residential location. In addition, Granite will work and communicate with the residential owner to minimize noise impacts associated with the operations.



Dust and emissions controls are regulatory requirements of air quality operating permits, issued and administered by the Utah Division of Air Quality. Dust controls will be established and employed to control emissions associated with the operating equipment as required by regulation. Additionally, site dust controls will be established and implemented to control fugitive dust generated by vehicle traffic and wind. These controls include, but are not limited to surface and material wetting using an onsite water truck, posting and enforcing vehicle speed restrictions, limiting or ceasing operations during high wind periods and chemical dust suppression application on facility access and adjoining road surfaces. Control of dust will be an operational priority for the facility.

# 9.2 SAFE ROAD ACCESS (INGRESS AND EGRESS)

As previously discussed in this application, safe site access and egress is provided and associated with this proposed use. I-15 is the main access transportation corridor and Exit 33 provides appropriate and safe acceleration and deceleration for transport vehicles using the facility. The Frontage Road located on the east side of I-15 provides direct access and egress from the materials facility. The main users of the Frontage road are truck traffic using the materials facility and from occupants of the single residential property in the vicinity. Haul truck traffic speeds will be restricted to travel speeds of 15 miles per hour. Emergency services access/egress is and will be available at all times.

#### 9.3 HOURS OF OPERATION

Hours of operation for the asphalt plant will predominantly be limited to the hours of 6am to 10pm, with capabilities of operating seven days per week. There are potential special circumstances which could require night-time plant operations. Examples include specific contract or project requirements that require asphalt paving operations to be completed during night operations to mitigate impacts to traffic or for public convenience. Given the adjacency of a residential property, Granite will implement neighbor notification for these special circumstances and make effort to minimize impacts and to accommodate the needs of the neighbor.

#### 9.4 RECLAMATION OF LAND

The proposed asphalt plant operations will be conducted within the footprint of the existing mining operation and will not require additional ground disturbance requiring additional reclamation measures. Site drainage associated with the asphalt plant operations will not change of increase drainage or site runoff. The current facility is graded and sloped to contain all site drainage within the footprint of the existing mining area. Site drainage patterns are provided in Figure 5. At the conclusion of the asphalt plant operations, all areas associated with the asphalt plant operations will be restored to similar conditions prior to the initiation of the asphalt plant operations.

#### 10.0 CONCLUSION

The approval to allow the proposed addition of an asphalt plant at the Snowfield Rock Products property and facility is being requested by both the owners of the Snowfield Rock Products property and Granite.

The information presented in this application is provided to demonstrate compliance with, and commitment to fulfilling all of the requirements established by all federal, state and local laws, codes

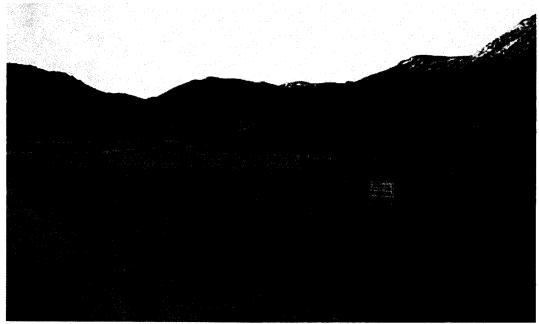


and ordinances associated with a Land Use Authority Approval administered by Washington County. Based on the facts presented and the commitment from both the property owner and Granite both parties respectfully request approval and support for granting a Conditional Use Permit to proceed with the requested operations as presented in this application.



Property Boundary Traffic Direction Haul Route

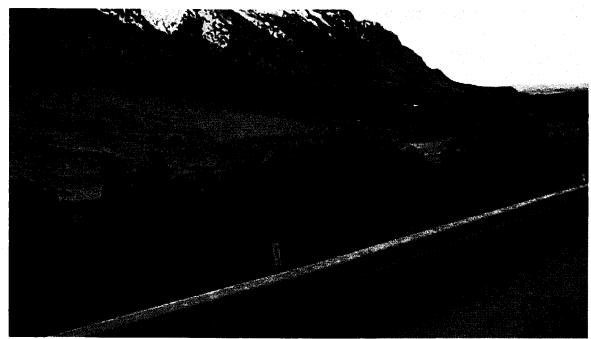
# FIGURE 3: CURRENT PHOTOGRAPHS OF SITE AND ADJOINING PROPERTIES



Photograph 1: On the frontage road heading north along I-15 toward the proposed area.



Photograph 2: Picture taken from I-15, West of the proposed area.



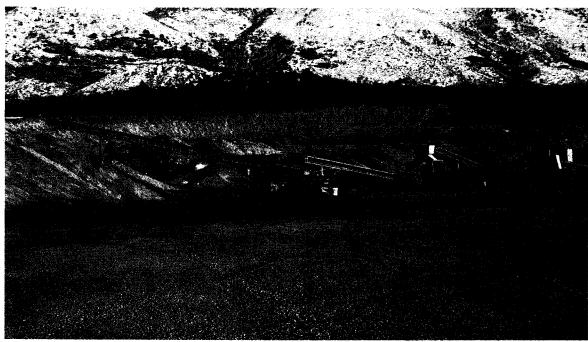
Photograph 3: Taken from I-15, looking South.



Photograph 4: Taken from East of pit, roughly 250' West of property boundary.



Photograph 5: Taken from East of proposed area at the top of the current mining area.



Photograph 6: Taken from Bottom of current mining area looking East.

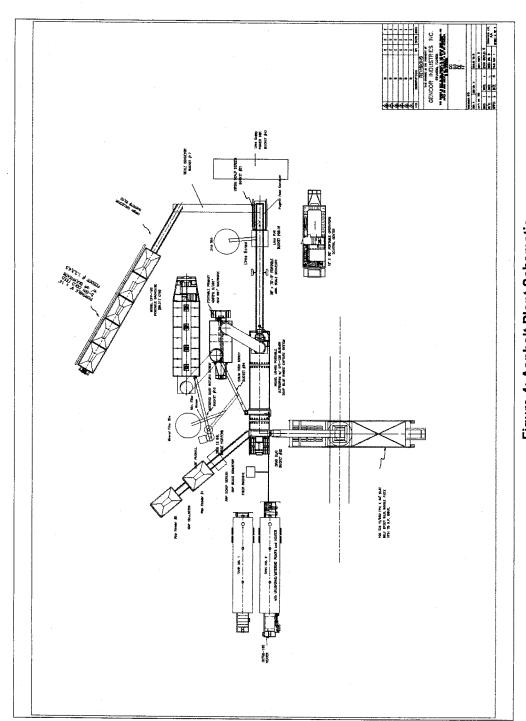


Figure 4: Asphalt Plant Schematic

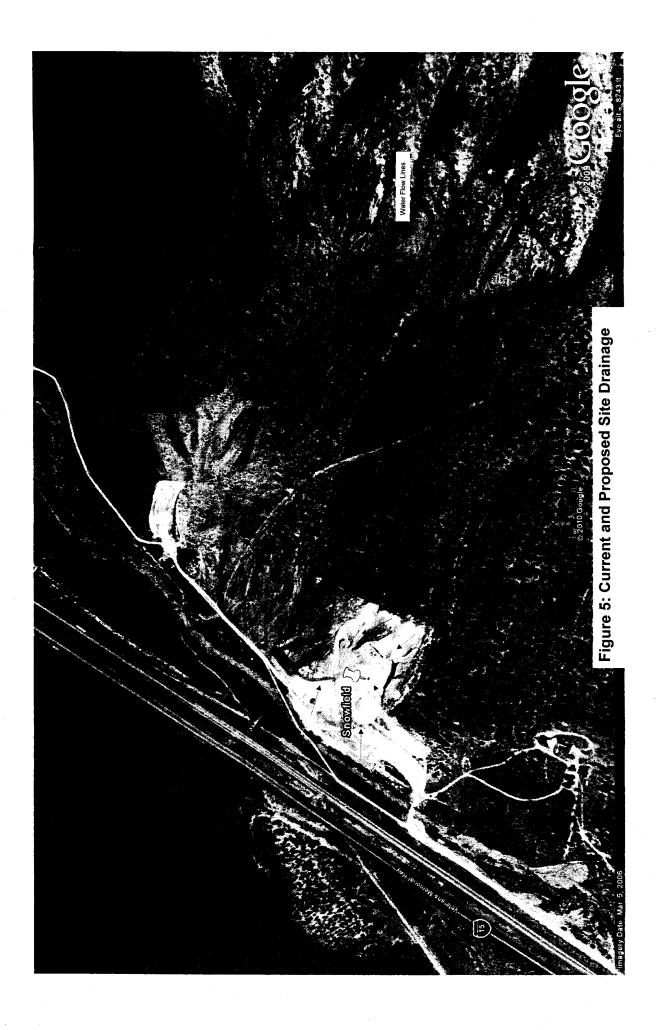


Figure 6: Photograph of Proposed Asphalt Plant